

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: **2000106533 A**(43) Date of publication of application: **11.04.00**

(51) Int. Cl.

H04B 1/38
H04L 27/10(21) Application number: **11214878**(22) Date of filing: **29.07.99**(30) Priority: **30.07.98 EP 98 98401954**(71) Applicant: **MOTOROLA**
SEMICONDUCTEURS SA(72) Inventor: **KHLAT NADIM****(54) METHOD AND SYSTEM FOR RADIO COMMUNICATION****(57) Abstract:**

PROBLEM TO BE SOLVED: To provide the method/system for radio communication that overcome defects of a conventional technology.

SOLUTION: This method consists of a step 100 that receives a radio frequency signal, a step 50 where a local signal with a fixed frequency ω_{RF} corresponding to a carrier frequency of a desired modulated signal and a phase ϕ_{SS} that changes with time depending on a prescribed phase function is oscillated, steps 110, 115 where a received signal and the local oscillation signal are mixed, a step 120 where the mixed signal is A/D-converted, a step where a low frequency local oscillator signal is generated, which has a zero fixed frequency and a phase ϕ_{SS} changing with time depending on a prescribed phase function when a signal is delayed by a prescribed delay corresponding to a time when the signal propagates between the 1st mix step and the 2nd mix step, and a step where recovered signal including both a desired base band signal whose phase is

independent of a prescribed phase function and a noise signal whose phase depends on a prescribed phase function are recovered by mixing the mixed signal with the low frequency local oscillator signal.

COPYRIGHT: (C)2000,JPO

